THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LVIII. THURSDAY, JUNE 24, 1858. No. 21.

FRACTURES OF THE HUMERUS.

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[Communicated for the Boston Med. and Surg. Journal.]

IT is not sufficient to consider fractures of this bone as occurring through the shaft and its two extremities, as some systematic writers have done; since upon this simple arrangement it is impossible to base a natural division of their causes, symptoms, prognosis and treatment.

We shall find it necessary to consider,

First. Fractures of the head and anatomical neck. (Intra-capsular; non-impacted and impacted.)

Second. Fractures through the tubercles. (Extra-capsular; non-impacted and impacted.)

Third. Longitudinal fractures of the head and neck, or splitting off of the greater tubercle.

Fourth. Fractures of the surgical neck. (Including separations at the upper epiphysis.)

Fifth. Fractures through the body of the shaft, or, of the shaft below the surgical neck and above the base of the condyles.

Sixth. Fractures at the base of the condyles. (Including separations at the lower epiphysis.)

Seventh. Fractures at the base, complicated with fractures between the condyles, extending into the joint.

Eighth. Fractures or separations of the internal epicondyle.

Ninth. Fractures or separations of the external epicondyle.

Tenth. Fractures of the internal condyle.

Eleventh. Fractures of the external condyle.

Of 90 fractures of the humerus examined by me, 16 occurred through the upper third, 15 through the middle third, and 59 through the lower third. Or, if we reject fractures of the head and neck, and fractures of the condyles, and confine our analysis to the shaft, 12 belong to the upper third, 15 to the middle third, and 27 to the lower third. An observation which is in contrast with the statement made by Amesbury, and which has been repeat-

ed by Lizars, B. Cooper, Fergusson, Gibson and others, that this bone is most often broken in its middle third.

Of the fractures belonging to the upper third, one was a separation at the junction of the epiphysis with the shaft, one was probably a fracture at or near the anatomical neck, with impaction and splitting of the tubercles, one was a fracture of the greater tubercle alone, and eight were fractures of the surgical neck.

Of the fractures belonging to the lower third, 14 were through the internal condyle and epicondyle, 14 through the external condyle, 14 were at the base of the condyles, and 4 through the condyles and across the base at the same time. The remainder, 13, being through the shaft, but above the base.

Unfortunately, surgical writers have not been agreed in the use and application of the terms "head," "neck," "anatomical neck," and "surgical neck" of the humerus; and as a consequence their meaning is often obscure, and their teachings are sometimes contradictory and absurd.* It is necessary, therefore, that we should define them more precisely.

The "head of the humerus" is that smooth, elliptical surface, covered by cartilage and synovial membrane, which articulates with, and is received into the glenoid cavity of the scapula.

The "anatomical neck" is the narrow line immediately encircling the head, and which receives the insertion of the capsular ligament.

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* *Head.*—Liston includes, in the term "head," all the space above the lower line of the tubercles (*Practical Surgery*, p. 49), and other surgeons have frequently spoken of the tubercles as a part of the head of the humerus.

Neck.—Chelius says that "a fracture of the neck of the humerus is that which takes place either near the tubercles of the bone, in them or above them." (*Surgery*, vol. i., p. 606.) By which he evidently means to say that the "neck" includes the whole of both the anatomical and surgical necks, with the tubercles. A definition which seems to me sufficiently accurate, in case we think it worth while to employ the term "neck" at all in a general sense as distinguished from the specific terms "anatomical" and "surgical." But Malgaigne uses the term "neck" in only one sense, namely, as applied to the so-called "surgical neck." He never uses it in a more general sense, nor does he even speak of fractures of the "anatomical neck," but of "fractures intra-capsular, or of the humeral head," which we understand to include fractures of the anatomical neck, as well as fractures of the head. While Robert Smith speaks of fractures of the "neck" as those which occur through the anatomical neck, or through the tubercles, or at a point as low as the epiphysis, and he mentions that by practical writers this whole region is often called "anatomical neck." (*On Fractures*, p. 184.) Amesbury confines the term "neck" to the anatomical neck properly speaking, "where it gives attachment to the capsular ligament." (*On Fractures*, vol. ii., p. 535.) It will be seen that I have employed the term "neck" as a generic term, including both anatomical and surgical neck, with the tubercles, but I think it would be better if the term was rejected altogether.

Anatomical Neck.—Sir Astley Cooper speaks of the anatomical neck as being at the point of junction between the epiphysis and diaphysis. (*On Disloc., Amer. Ed.*, p. 371.) He also speaks of "fractures through the tubercles or anatomical neck" (p. 379). It is not very plain whether Sir Astley intended to call the nearly transverse line just below the tubercles, which is the real line of the epiphysis, the anatomical neck, or whether he supposed the line of epiphyseal separation to follow the line of the insertion of the capsule, as Vidal (de Cassis) (*Traité de Pathologie Ext.*, etc., tom. ii., p. 114) and Reichel (*Malgaigne*, vol. i., p. 527) have since supposed.

Surgical Neck.—"Fractures below the articulation, between it and the insertions of the pectoralis major, latissimus dorsi, teres major, coraco-brachialis, and deltoid muscles. This part has been called the surgical neck." (*A. Cooper, op. cit.*, p. 372.) Norris places the surgical neck "between the tubercles and the insertion of the pectoralis major, coraco-brachialis, latissimus dorsi, teres major and the deltoid muscles." (*Amer. Jour. Med. Sciences*, vol. xxvi., p. 227.) Erichsen drops from the definition only the coraco-brachialis. (*Surgery*, p. 209.) Malgaigne drops also the deltoid (*Traité des Frac.*, vol. i., p. 514), and Gibson the teres major; so that, according to this latter, the surgical neck is only that portion which is intermediate to the tuberosities on the one hand, and the pectoralis major with the latissimus dorsi on the other. (*Surgery*, vol. i., p. 279.)

The "surgical neck" is that portion which commences at the lower margin of the tubercles, or at the point of junction between the epiphysis and the diaphysis, and which terminates at the insertion of the pectoralis major and latissimus dorsi.

The "neck" is all of that portion included between the head and the insertion of the pectoralis major and latissimus dorsi, comprising not only the anatomical and surgical necks, but also the tubercles, which occupy the triangular space between these two.

§ 1. *Fractures of the Head and Anatomical Neck. (Intra-capsular; Non-Impacted and Impacted.)*

Causes.—The causes which have been found competent to produce fractures of the head and anatomical neck are, the penetration of balls or of other missiles directly into the joint, producing thus a compound, and generally comminuted fracture of the head; or falls, or direct blows upon the shoulder without penetration.

Pathology, Results, &c.—When the fracture results from the direct penetration of some foreign body into the joint, it is not only a compound fracture, but the head of the bone is almost necessarily broken into fragments. These accidents are generally fatal; not so much from the peculiar nature of the injury, as from the severity of the blow requisite for their production, and from the complications which usually attend them. If the patients recover, sooner or later the fragments have generally to be removed.

Fractures of the anatomical neck, produced by falls upon the shoulder without penetration, are, however, usually neither compound nor comminuted, but they often traverse, with a remarkable degree of accuracy, the line of the insertion of the capsular ligament, being always, according to Robert Smith, within the inferior or outer margin of this insertion. He calls them, therefore, intra-capsular. It is probable, however, since, as we shall presently see, bony union is not denied to this fracture, that the line of separation is not always, or generally perhaps, completely within the insertion of the ligament, but it is in some degree extra-articular, if not extra-capsular. If it is entirely intra-articular, no doubt union of the fragments can never take place, and generally suppuration will ensue, demanding, at a period not very remote, an operation for their removal, the same as in compound fractures. Dr. Daniel Brainard, of Chicago, informs me that he has twice had occasion to open the shoulder-joint for the removal of the head of the bone, rendered necessary by the suppuration resulting from severe injuries. In the first case, Dr. Brainard removed the fragment about one year after the accident. It was "loose, necrosed and partly absorbed or macerated." In the second case the operation was made about three months after the receipt of the injury. Both have recovered, with pretty useful arms.

Gibson, however, thinks that the fragment occasionally remains, being gradually absorbed and changed in figure. He says that his Museum contains three or four well-marked cases of this kind, in

all of which the head has lost its spherical form, and is very much diminished, and rough and flattened next to the scapula.* Other cabinets contain similar specimens.

The displacements to which the upper fragment, or the head of the bone, is subject, are remarkable, and some of them do not seem to be satisfactorily explained. Frequently, indeed, its position is not sensibly disturbed, but at other times it is found impacted, or driven into the cancellous structure of the inferior fragment, in consequence of which one or both of the tubercles are frequently broken off.

Robert Smith relates the following case as having afforded him his first opportunity of ascertaining, by *post-mortem* examination, the exact nature of this form of displacement.

"A female, æt. 47, was admitted into the Richmond Hospital under the care of the late Dr. McDowell, for an injury to the humerus, the result of a fall upon the shoulder. Five years afterward the woman was again admitted, under the care of Mr. Adams, with an extra-capsular fracture of the neck of the femur, one month after the occurrence of which she died, in consequence of an attack of diarrhœa.

"The shoulder was of course carefully examined; the arm was slightly shortened, the contour of the shoulder was not as full or round as that of its fellow, and the acromion process was more prominent than natural. Upon opening the capsular ligament, the head of the humerus was found to have been driven into the cancellated tissue of the shaft, between the tuberosities, so deeply as to be below the level of the summit of the greater tubercle; this process had been split off and displaced outward; it formed an obtuse angle with the outer surface of the shaft of the bone."†

The description is accompanied with two excellent drawings of the specimen, showing the distance to which the superior fragment had penetrated the inferior, and showing also complete union by bone.

I believe, also, that in the following example there was a fracture at or near the anatomical neck, with impaction, and splitting of the tubercles.

January 12th, 1858, a young man, aged about 16 years, fell from a height in a gymnasium, severely injuring his left shoulder. I saw him, with Dr. Boardman, soon after the accident, and found him complaining very much of the shoulder, which was some swollen and tender. He could not tell us how he fell, nor could we discover any contusions by which to determine the point where the blow was received. All motions of the shoulder-joint were painful; and there was a remarkable fulness in front of the joint, feeling like the head of the bone, yet not such as is usually present in a forward luxation. To determine this more positively, however,

* Gibson. Elements of Surgery, vol. i., p. 279.
† R. Smith. Fractures in vicinity of Joints, pp. 191-3.

the limb was manipulated as for the reduction of a dislocation. Once during the manipulation a feeble but distinct crepitus was detected; yet the position of the bone remained unchanged. The head was found to be in the socket, but the precise nature of the injury was not made out.

Fifteen days later, when the swelling had completely subsided, a careful examination was again made by Dr. Boardman and myself, when we arrived at the conclusion that it was a fracture through the bicipital groove, and that the greater tubercle was carried forward half an inch or more from its fellow, while the head, with the lesser tubercle, occupied their natural positions opposite the socket. The fragment projecting in front presented a sharp point, and could not be confounded with any swelling of the soft parts. There was a distinct space between the tubercles, into which the finger could be laid. No depression existed under the acromion process behind, but on measurement the head of this humerus was found to be half an inch wider in its antero-posterior diameter than the opposite.

That this fracture was accompanied with impaction was rendered certain by the repeated and careful measurements of the length of the humerus, which constantly showed a shortening of half an inch.

Under these circumstances union generally takes place; but it is usually accompanied with the formation of an irregular mass of osteophytes, which encircle the head like a coronet; presenting in this respect again a remarkable resemblance to extra-capsular fractures of the neck of the femur. This insheathing callus, as it may be called, is an outgrowth from the inferior fragment, and it sometimes encloses the upper fragment as the case of a watch encloses the crystal, only in a manner much more irregular, thus retaining it steadily in its place, although very little direct union has occurred. The cancellous tissue, nevertheless, is occasionally found united completely by a new and intermediate bony tissue, and at other times by a fibrous tissue, or by both fibrous and bony tissue.

In some cases a perfect false joint has been formed between the opposing surfaces, while in a few unfortunate examples the head not only refuses to unite, but by its presence, as we have already remarked, produces inflammation and suppuration, resulting in its final extrusion from the joint. The cases reported to me by Dr. Brainard, and already described, illustrate this latter class.

At other times the upper fragment turns upon its own axis, and is found more or less tilted or completely rotated in the socket; so that its cartilaginous or articulating surface rests upon the broken surface of the lower fragment, and its own broken surface presents toward the glenoid cavity.

Robert Smith has described a specimen of this kind, which he removed from the body of a woman, aged 40, who many years previous to her death fell down a flight of stairs, and struck her shoulder with great violence against the edge of one of the steps.

Whether she applied to a surgeon or not at the time of the accident, Dr. Smith was not able to ascertain. After death the shoulder looked somewhat as if there was a dislocation of the humerus into the axilla, there being a marked depression under the acromion, but the shaft of the humerus was drawn upward and inward toward the coracoid process.

When the capsular ligament was opened, the head of the bone was found to have been broken from the shaft through the line of the anatomical neck, and completely turned upon itself; and the cartilaginous surface was actually driven one inch into the cancellated structure of the shaft, so as to split off the lesser tubercle with a portion of the greater. Only one half of the upper fragment was thus impacted, the other half projecting beyond the margin of the lower fragment. Between the cartilaginous surface and the shaft no union had occurred; but there was complete bony union between the upper and lower fragment, beyond the limits of the cartilage.

The upper surface of the superior fragment rested in part against the inner half of the glenoid cavity and upon its inner margin, and in part it rested against the neck of the scapula in the direction of the coracoid process.*

Nélaton saw a similar specimen in the possession of M. Dubled, the revolution of the upper fragment being complete; but there was no lateral displacement, and the union had been accomplished in a manner similar to that which is seen after intra-capsular, impacted fractures, without reversion.†

I have also been permitted to examine a specimen belonging to Dr. Charles A. Pope, of St. Louis, Mo., which seems to have been broken not only through the line of the anatomical neck, but also through the surgical neck. Both fragments are united by bone, the lower fragment being carried in the direction of the coracoid process, while the upper fragment appears to be reversed, so that its articular surface is directed toward the shaft, and its broken surface articulates with the glenoid cavity. The history of this specimen is unknown.

It is possible, we think, that these extraordinary changes of position were not the direct result of the accident which broke the bone, but that they have been taking place gradually and through a long period. It is certainly quite as probable that the constant motions of the arm should accomplish these displacements, as that they should be produced by a direct blow; indeed, the former supposition appears to us much the most probable.

There is another supposition which, in my opinion, is capable of explaining most of the phenomena usually present in these cases, and which renders the supposition of a fracture unnecessary. It is, that these are all of them examples of softening of the neck

* R. Smith. *Op cit.*, pp. 193-6.
† Nélaton. *Elémens de Pathol. Chirur., tom. prem.*, p. 730.

of the bone, as a result of chronic inflammation, ulceration, &c.; and that the changed position of the head is due to pressure alone, being acted upon by the muscles which surround the joint, and which act all the more vigorously because they partake also of the inflammation which has invaded the bone. This view of these specimens, which had already more than once suggested itself to me, was very strongly confirmed by its having occupied the mind also of Dr. Neil, of Philadelphia, and who at his own instance stated to me that he believed this was their true explanation. We were, at the time, examining Dr. Pope's specimen, already alluded to, and on comparing it with a specimen of dislocation and partial absorption of the head of the humerus, contained in Dr. Neil's Museum, the points of resemblance were so numerous and striking that we felt compelled to doubt whether Dr. Pope's specimen, together with those seen by Smith and Nélaton, did not belong to the same class with this of Neil's.

In a case of fracture of the "cervix humeri within the capsular ligament," examined by Sir Astley Cooper, there was also a complete forward luxation of the head; but ligamentous union had occurred between the fragments.* Many similar cases have been reported by other surgeons.

§ 2. ***Fractures through the Tubercles.*** (***Extra-capsular; Non-Impacted and Impacted.***)

Under this division we intend to speak of all fractures traversing the upper end of the humerus, and involving the tubercles, or of all those which occur between the anatomical neck on the one hand, and the epiphyseal junction, or surgical neck, on the other hand, and which may be more or less oblique as well as transverse. Fractures of the greater or lesser tubercles are of course excepted, since they are more properly longitudinal fractures, and do not completely traverse the diameter of the bone. Nor do we intend to include those fractures which occur at the epiphyseal junction, since, being below the principal insertion of those muscles which are attached to the tubercles, they present very peculiar and distinctive features which will demand for them a separate classification.

Causes, Pathology and Results.—Fractures through the tubercles, like fractures through the anatomical neck, are the results generally of direct blows received upon the shoulder. They are not usually accompanied with much lateral displacement at the point of fracture; a circumstance which finds a partial explanation in the fact that the line of fracture is through the insertions of the muscles converging upon the tubercles and not entirely above or below them, so that they continue to act nearly equally upon both fragments; but it is also sometimes due in a measure to impaction: the head being forced downward toward the axilla, and upon the shaft until it is made to ride upon its inner or axillary wall like a

* A. Cooper on Dislocations, &c., p. 372.

cap: the compact bony tissue of the shaft penetrating the reticular structure of the head. These fractures generally unite by bone, but more or less impairment of the motions of the joint results from the inflammation which occurs in and about the joint, or from the irregular deposits of bone in the vicinity of the fracture.

§ 3. *Longitudinal Fractures of the Head and Neck; or Splitting off of the Greater Tubercle.*

Causes, Pathology, Symptoms and Results. — Mr. Guthrie seems to have been the first to call attention to this peculiar injury of the shoulder. In a lecture delivered in November, 1833, he described four cases which had come under his observation, and which he regarded as examples of separation of the small tuberosity, accompanied with more or less of the head, the fracture extending along a portion of the bicipital groove.*

Robert Smith, however, believes that it was the greater and not the lesser tuberosity which was thus detached in the cases mentioned by Mr. Guthrie, since the external signs were so nearly like those which were present in a woman seen by himself, and in which an autopsy enabled him to verify his diagnosis. The following is the case as related by Dr. Smith.

"In July, 1844, I was requested to examine the body of Julia Darby, æt. 80, who had died of chronic pulmonary disease. Upon entering the room, the appearances of the left shoulder-joint at once attracted my attention, and struck me as being different from those which attend the more common injuries of this articulation.

"The shoulder had lost, to a certain extent, its natural rounded form; the acromion process, although unusually prominent, did not project as much as in cases of dislocation of the head of the humerus. The breadth of the articulation was greatly increased, and upon pressing beneath the acromion, an osseous tumor could be distinctly felt, occupying the greater part of the glenoid cavity; it formed a prominence which was perceptible through the soft parts; it moved along with the shaft of the humerus, but was manifestly not the head of the bone.

"A second and larger tumor, presenting the rounded form of the head of the humerus, lay beneath the base of, and internal to, the coracoid process, and between the two the finger could be sunk into a deep sulcus, placed immediately below the coracoid process. The elbow could be brought into contact with the side, and there was no appreciable alteration in the length of the arm.

"Upon removing the soft parts, the head of the bone presented itself, lying partly beneath and partly internal to the coracoid process. The greater tuberosity, together with a very small portion of the outer part of the head of the bone, had been completely separated from the shaft of the humerus. This portion of the bone occupied the glenoid cavity, the head of the humerus having been

* Robert Smith, p. 181, from *London Med. and Phys. Journal.*

drawn inward so as to project upon the inner side of the coracoid process; it was still, however, contained within the capsular ligament.

"The fracture traversed the upper part of the bicipital groove, which, in consequence of the displacement which the head of the bone had suffered, was situated exactly below the summit of the coracoid process. A new and shallow socket had been formed upon the costal surface of the neck of the scapula, below the root of the coracoid process, and the inner edge of the glenoid cavity corresponded to the posterior part of the sulcus, which separated the head of the bone from the detached tuberosity. The latter was united to the shaft only by ligament.

"The capsule had not been injured, but was thickened and enlarged, and bone had been deposited in its tissue. The injury had evidently occurred many years before the death of the patient, but the history connected with it could not be precisely ascertained."*

Mr. Smith relates one other case, in the living subject, which he saw, in connection with Mr. Adams, at the Richmond Hospital, and he adds that "numerous" other living examples have fallen under his observation.

Sir Astley Cooper has also published the particulars of a case of fracture of the greater tubercle, which was communicated to him by Mr. Herbert Mayo.†

The following I believe also to have been an example of this rare accident.

John Hill, æt. 78, fell upon the sidewalk, striking upon his right shoulder. The physician to whom he was sent thought the humerus was dislocated, and directed him to the Buffalo Hospital of the Sisters of Charity, but he did not apply for admission until eight days after, Oct. 14, 1857, when Dr. Boardman and myself examined the limb carefully.

Although we placed him under the influence of chloroform, the diagnosis was not satisfactorily made out. We inclined, however, to the opinion that it was a fracture of the greater tubercle. The antero-posterior diameter of the upper end of the bone was greatly increased, there was occasional distinct crepitus, but the limb was not shortened.

Subsequently, the examinations were repeated many times, and the depression between the fragments becoming more palpable, the diagnosis was at length confirmed.

No treatment was adopted, except confinement in bed, and stimulating embrocations. Two months after the accident he still remained an inmate of the hospital, his shoulder being quite stiff, and the projection continuing in front.

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* Robert Smith. *Op. cit.*, p. 178.

† A. Cooper. On Dislocations and Fractures of the Joints. Edited by B. Cooper. American Edition, p. 384.

Mr. Robert Smith thinks that when the displacement is considerable, the fragments generally unite by ligament rather than by bone.

[To be continued.]

PERNICIOUS FEVER.

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[Communicated for the Boston Medical and Surgical Journal.]

CASE I.—At 5, P.M., February 20, 1858, I saw James B., æt. 2 years, in convulsions. Ordered a warm bath, and allowed him to slowly inhale fifteen drops of chloroform. The convulsions ceased in ten minutes, after which the surface became cool and very pale; pulse small and frequent; pupils dilated and insensible. There was tonic spasm of the posterior cervical muscles, so that the head was drawn backward; thumbs forcibly turned into the palms. Once in ten or fifteen minutes, he started from a comatose condition, with a cry indicative of the greatest terror, followed by a few clonic spasms.

I learned that he was well until noon of the previous day; in the afternoon became fretful and looked pale, vomited several times, and passed a restless night. At 12, M., had a convulsion, lasting fifteen minutes, and at 5, P.M., another, during which I first saw him.

Applications of cold were made to the head, stimulating enemata administered, sinapisms over the spine, and warmth to the extremities. Gave one grain of sulphate of quinia every hour.

Feb. 21, 9, A.M.—Patient has had several convulsions in the interval of visits. Extremities cold; no pulse at the wrist; pupils dilated, and insensible to light. On the face and chest were petechiæ as large as a three-cent coin; upper portion of body bathed in a profuse sweat. Had taken eight grains of quinia. No treatment. Patient died at 11, A.M.

The body, twenty hours after death, presented no trace of the mottled appearance; rigidity was slight. No autopsy allowed.

CASE II.—M. P., a female, æt. 18, complained of headache and general lassitude, Feb. 22. Took supper at 5, P.M., during which she was seized with chill. Chill was attended with delirium and vomiting. At 10, P.M., the family physician found her comatose, pupils contracted, and neck stiff. (Blister to the neck, leeches to scalp and an active cathartic.) Cathartic operated in twenty-four hours, when Dr. Craig first saw her. Pulse counted 120, quick, small and frequent; pupils dilated, and insensible to light; delirium constant, and extremities cool. (Whiskey and quinia.) Patient sank in five hours. No autopsy allowed.

CASE III.—Mrs. G., aged 35, had had headache and weariness, slight chilliness and "flashes of fever" several days. Had a severe chill, February 21, accompanied with convulsions. Blocks of wood,

heated in boiling water, were placed beside her in bed; sinapisms were freely applied to spine and extremities. After the convulsions ceased there remained stiffness of the neck; pupils were dilated; skin mottled; pulse quick and frequent, hardly perceptible at the wrist; delirium constant; vomits freely; strabismus. Moderate reaction was finally established, her symptoms improved, and she was ordered a cathartic.

Feb. 22d.—Patient had a recurrence of the convulsions after twenty-four hours, attended by the same phenomena. After the convulsions ceased, she continued delirious. (Quinia, gr. iij. every second hour until next visit.)

23d.—Patient is better. After this date, she was troubled with headache, double vision, strabismus and tinnitus, which, being still periodical, were successfully treated with quinia. Convalesced in two weeks.

Case IV.—Mrs. F. P., aged 25, complained of headache and lassitude March 6th, and previously. Had a chill on the 6th, followed in one hour by delirium, which was soon succeeded by coma. Head was thrown forcibly backward. Dr. Craig saw her at 5, P.M. Reaction was aided by blocks of hot wood, sinapisms, &c. (Quinia, gr. iij. every hour for twelve hours.)

March 7th, 5, A.M.—Patient somewhat rational; when aroused, complains of intolerance of light and sound; pulse small and frequent. (Whiskey.) During convalescence had many signs of disordered innervation. Got well under the use of quinia.

The preceding are cases so selected as to give a fair representation of an affection which we have dealt with in this vicinity for two years. The four reported are among the severe cases. Besides such, we have observed attacks in which general lassitude or weariness, headache, pains in back and limbs, chilliness and flushes of heat, sickness at stomach, anorexia, &c.—all of which symptoms have been clearly periodical—are the principal complaints of our patients. Of the deaths occurring this year, we could obtain no autopsies. I therefore report such cases as were fatal last year, and in which *post-mortem* examinations were allowed.

Case I.—N. B., æt. 5, died in February, 1857, after an illness of a few hours. As death occurred before his physician arrived, I can only report that the parents noticed that the child became fretful and extremely pale, vomited, was convulsed, and died in convulsions. Parents stated that the child played in the street eight hours before death; did not know that he had been out of health.

Autopsy.—As the patient was supposed to have been convulsed from eccentric irritation, the stomach and intestines were first examined; we found them healthy, with no appearance of irritating ingesta or parasites. Thoracic viscera healthy. Integuments of head bled freely; sinuses were extremely full; pia mater congested, congestion principally venous; slight effusion beneath arach-

noid; puncta of cerebral substance rather more numerous than usual.

Case II.—A child, æt. 4, had been restless the previous night. Found him, Feb. 23, pale; pulse was small and frequent; head forcibly extended; surface mottled; delirious. Could not learn whether he had had a well-marked chill. During visit, vomited and had convulsions. (Hot bath, stimulants, sinapisms over spine, and on extremities.) No reaction. Child died thirty-six hours after attack.

Autopsy.—Rigidity slight. Brain only was examined, where the same congestion was noticed as was observed in the preceding case.

Case III.—About March 1st, I attended a *post-mortem* examination in the case of Miss T., æt. 16, who sat down in the evening to write a letter. She was somewhat unwell, and had been for a day or two troubled with headache, was seized with chill, had projectile vomiting, and soon after delirium. No reaction ensued, and patient died in the morning at 5.

Autopsy.—Surface of an almost universal lividness; face much swollen; "froth" about the mouth and nose; almost no rigidity. Integuments of head bled freely, a streamlet running from the incised portion of scalp; sinuses distended to the utmost extent; colored serum in the ventricles and beneath pia mater. On making a section of the hemispheres, the knife severing the vessels, carried enough blood with it to give the section a marked appearance. No other organs examined.

Case IV.—Miss G., æt. 15, was seized, March 12, with chill attended by severe headache, pain in neck and back. Reaction, as in other cases, was not proportionate to the chill. Reaction was accompanied by delirium, strabismus, clonic spasms, and strong extension of the head. (Quinia.) During a tedious apparent convalescence of four months she was troubled with headache, tinnitus, strabismus and double vision, sickness at stomach, anorexia, &c. After a long time she was able to ride out, made visits, and gained flesh. Yet she still carried a pale, sallow complexion, such as people often have after suffering a long malarial fever. She continued to improve up to the sixth month, when she began to complain of increased headache and sickness at the stomach, the headache being paroxysmal, once in a half hour, sometimes entirely ceasing. Respirations were irregular, and inspiration consisted of a double effort. In this way she lived two days, and was perfectly rational up to one or two minutes before death.

Autopsy.—Stomach showed softening of the mucous body along greater curvature, which was supposed might be *post-mortem;* a beautiful arborescent appearance near pylorus. Gall-bladder distended with bile; liver healthy; spleen not increased in size; other viscera, abdominal and thoracic, healthy. Meninges and cerebral substance showed no remains of inflammation, and yet the

ventricles were distended with serum to the amount of six ounces. Some effusion beneath arachnoid of the spinal cord. A small portion of the medulla oblongata notably softened, so much so that a portion elevated on the scalpel might be dropped in two separate pieces.

CASE V.—Miss R., æt. 8, among the first cases, died eight months after attack. Had been entirely rational, and apparently well, except about once a week or two, when she had spells of clonic spasms. Confined to the bed two days before death, complaining of headache and difficulty of breathing; pupils both dilated. Respirations ceased several minutes before pulsations of the heart.

Autopsy.—Head and spine only examined. No appearance of inflammation. Eight ounces of serum obtained, mostly from the ventricles.

The preceding are a few of the many cases of the epidemic which commenced in Monroe County early in 1857. It has also spread itself quite generally through the State. Most attacks have originated where intermitting and remitting fevers prevail, rarely showing themselves on the higher soils, frequently along the courses of sluggish streams. The intensity of the affection has been various—from a periodical headache to a frightful form of disease in which no amendment takes place, the patient dying in a few hours, or, perhaps, in one or two days.

The cause is undoubtedly the same as that of the more ordinary miasmatic fevers, for the following considerations. The milder and moderately severe forms have been distinctly periodical, as have also the grave continued forms after amendment. Quinia interrupts the disease. *Post-mortem* appearances are those of congestive fevers existing at the South and Southwest. Its habitats are the same.

The disease has been called "brain fever," "cerebro-spinal meningitis," &c. But its periodicity, its sudden invasion, and the fact that quinia is the difference between life and death, will not warrant us in supposing inflammation to be its essential character. Can meningitis be cured with quinia? Again, the unmistakable signs of inflammation are seldom found. The deaths could not have resulted so suddenly in these cases from inflammation. The congestion was insufficient to cause death, with one exception. Depraved innervation resulting from a circulating poison, it seems to me, will only account for the sudden death observed in so many cases. Faulty innervation has been manifested by an extremely variable pulse, the change being sometimes fifty beats to the minute in the course of an hour, without any sign of fever; also by the excessive vomiting, profuse sweating in the latter stages, petechiæ and paleness, showing the loss of innervation in the capillaries, irregular respiration and subsultus.

In this section, children and adults have been equally subject. The number of cases in all, in this town, treated mostly by Dr.

Craig, is about 200. In other places, we hear of its attacking principally adults.

Thacher, in his "Modern Practice," has given histories of epidemics which have been thought similar to the one under consideration.

In treatment quinia occupies almost the entire ground. In moderate cases, we have waited for the interval, in grave cases waiting for nothing, but giving it with a liberal hand, notwithstanding convulsions, delirium or coma. Patients have convalesced under the use of six grains every hour for eight or ten hours. Bleeding has been proposed, but was tried in only one instance, so far as I know. The error was soon acknowledged, although it was in one of the most robust patients, with an evidently exceedingly hyperæmic condition of the brain. Palliative measures, of course, should be resorted to.

Bibliographical Notices.

Mind and Matter, or Physiological Inquiries. In a series of Essays intended to illustrate the Mutual Relations of the Physical Organization and the Mental Faculties. By Sir Benjamin Brodie, Bart., D.C.L., &c. With additional Notes by an American Editor. New York: Samuel S. & William Wood. 1858. 12mo. Pp. 279.

This little work consists of a recapitulation of the principal facts and theories on the subject of the connection between mind and matter. It is written in a familiar style, so as to be easily comprehended by those who are not acquainted with that abstruse subject, and hence it is a popular rather than a scientific work, though the pleasing manner in which it is written will render it acceptable to the profound student in psychology, who may devote a few hours to its perusal both with pleasure and profit. The form of dialogue has been selected by the author, as the best adapted for inquiries of this nature, and it certainly adds variety and interest to so abstract a subject. We recommend the book to all, lay as well as professional, as a most agreeable and instructive work.

For some reason, not explained, the American editor has chosen to alter the title of the work in this edition, and he has by no means improved it. The original title is "Psychological Inquiries, in a Series of Essays, &c." Why "physiological" should be substituted for "psychological" (unless by an error of the press), it is not easy to see, any more than the necessity of the interpolation of the words "Mind and Matter," which are sufficiently indicated by the context. We conceive that the title of a work is as much the property of the author as any part of the text, and protest against an alteration in it without his sanction.

Of Nature and Art in the Cure of Disease. By Sir John Forbes, M.D., D.C.L., F.R.S., &c. From the Second London Edition. New York: Samuel S. & William Wood. 1858. 12mo. Pp. 261.

The views advanced in this book have long been familiar to the profession in this part of our country. Ever since the discourse on Self-

Limited Diseases, by Dr. Bigelow, a more enlightened estimate of the comparative agency of nature and art in the recovery from disease has prevailed among us. We apprehend, however, that Dr. Forbes's book has fallen like a bomb-shell into the midst of some communities, even in the author's own country. Like most of the productions of great minds, it is in advance of the age, and the author is doubtless regarded by many of his readers as an entire skeptic in the efficacy of any treatment in disease. We doubt not the book will tend to unsettle the minds of many of the laity, and favor, temporarily, the cause of empiricism; at any rate, it will probably be quoted by quacks as a proof that the treatment of disease by the regular faculty is all humbug. Time and the progress of rational medicine will set all this right, and will show that while we must always be more or less dependent upon drugs in the treatment of disease, especially in chronic cases, yet these agents are to be used *as* agents, and not as principles, in accomplishing the cure; that they are to be wholly omitted when Nature is competent to do all her work unaided, as is frequently the case in acute affections, and not seldom in those of longer duration; to be often employed for the sake of relieving pain, procuring sleep, or improving the general condition of the patient, when they may do nothing for his safety, or toward abridging his sickness, and never to be given without due regard to the general hygienic condition, which is commonly of equal or greater importance.

We are glad that Sir John Forbes's book has had an extensive sale in England, and we trust that the American reprint will be no less widely circulated. We believe it will exert a most favorable influence on the progress of the science of medicine, will tend to raise the profession in the estimation of the public, and, as a natural consequence, check the spread of quackery throughout our land.

Clinical Lectures on the Principles and Practice of Medicine. By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine, and Senior Professor of Clinical Medicine in the University of Edinburgh, &c. Second Edition, with four hundred and sixty-eight Illustrations on Wood. New York: Samuel S. & William Wood. 1858. 8vo. Pp. 951.

The second edition of Dr. Bennett's admirable work is greatly enlarged, and illustrated with excellent engravings. It is perhaps the most complete work on the subject in the English language, and we know of no one which we can more highly recommend to the student. All the latest discoveries, the most recent views on the subject of practical medicine, are embodied in it, and the statements of the author always rest on the basis of facts. The present edition is beautifully printed, and will doubtless meet with a ready sale.

Contributions to Operative Surgery and Surgical Pathology. By J. M. Carnochan, Prof. of Surgery in the New York Medical College; Surgeon-in-Chief to the State Emigrants' Hospital, &c. *With Illustrations drawn from Nature.* Number I. Philadelphia: Lindsay & Blakiston. 1858. Quarto. Pp. 32.

This beautiful work reflects much credit on the author, and the publishers. The present number contains the report of a case of amputation of the entire lower jaw, followed by remarks on that opera-

tion; and cases of Elephantiasis Arabum, successfully treated by ligature of the femoral artery. It is illustrated by two admirably executed drawings on stone, printed in colors. The cases and remarks are of great interest, and form valuable contributions to the science of surgery. It is contemplated to publish nine more numbers, in similar style, the ten forming a complete volume, the first of a series. The contents of these are no less interesting than are those of the present number. The letter press is done in the most finished style, and the whole work is a beautiful specimen of the typographical art, worthy of its contents.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 24, 1858.

THE STANDARD OF MEDICAL EDUCATION.

We have already recorded the intimation given by Dr. James Jackson, at the annual dinner of our State Society, that the period of medical study ought to be prolonged. The immeasurable advantages of such an arrangement, both to the profession and the community, must be apparent on the least reflection. Under the present system, it is not possible for students to acquire such a knowledge as shall fully fit them for the countless emergencies of practice. Two years added to the time now given, would, however, enable them to attain a familiarity with many topics, and a degree of facility in practical medicine, of which they usually get but a mere smattering.

There is not, moreover, such a crying demand for physicians that they need be made as if by machinery—the greatest possible number in the shortest possible time. The people, in nearly every part of the country, are reasonably well supplied with medical advisers. Possibly, more *good* ones are needed at the West. Generally speaking, however, our population can afford to wait for reliable and well-instructed physicians, and such alone should hereafter be furnished to them.

It is a startling fact, with which we have been made often and painfully familiar within a few years, that there is a large number of practitioners whose common-school education has been so wofully neglected that they do not know how to spell correctly, and hardly can compose a readable sentence! Whilst this is true of their acquaintance with their own language, it is not to be expected, and it is not found, that they know anything of such terms and phraseology as it is supposed will be familiar to those who would acquire a competent knowledge of Materia Medica and the power of writing a prescription that an apothecary can decipher. If it be said that such aspirants for the degree of M.D. can write their prescriptions in English, we admit they can, perhaps, after a fashion—but is not a sufficient acquaintance with Latin at least a *desideratum?* Nay, is it not a necessity?

Putting aside the Latin, however, we submit that it is an abomination to grant the medical degree to men who cannot spell their mother tongue even decently well; and it is a disgrace to such men, receiving as they do the confidence of the community wherein they dwell,

not to fit themselves better for their duties. Not only are many regularly graduated physicians, to our knowledge, incapable of speaking and writing their own tongue correctly, but as many, perhaps more, take no pains whatever to keep themselves informed about their profession.

We are aware that there are those who will think our strictures of little consequence—perhaps will laugh at them—and will say that these men who are so culpably ignorant or negligent, in our land of free schools and unbounded facilities for mental culture, make very good doctors after all! Do they, indeed? What a misnomer the term "*doctor*" has gotten to be! and worse than all, when *medicinæ* comes into juxta-position with it.

We fearlessly assert that no man can be so good a physician if he enters his profession with only a quarter part, or less, of his common education acquired, as he might have been had he been well appointed in all that advances the knowledge of so difficult an art. It is true, indeed, that success subsequently depends upon the industry, conscientiousness and application of each man—without taking into account those instances of rare talents or fortuitous circumstances favoring the progress of certain individuals; yet there is every advantage in a thorough common-school education and in an extended and faithfully-followed course of preparatory medical studies. Our profession will never command that respect which it might if its standard were raised in these respects, and maintained in an elevated position. Why should we, out of all the civilized nations of the earth, devote the smallest portion of time to fitting men for so responsible a charge as that of the physician and surgeon? The time consecrated in other countries to these studies, and the aid afforded by government to all genuine medical institutions, as well as to indigent young men who wish to fit themselves for the medical profession, is worthy of imitation as well as admiration in our own land. There may have been a time—doubtless there has been—when it was necessary that many physicians should be furnished at short notice—ground out roughly, and turned in to their work too often with their professional eyes only half open—perhaps not so far as that. But this time has gone by. We now need, particularly, educated, accomplished men to practise medicine, and the same sort of men, always, to teach it—also an extended term of study, to meet the increased amount to be learned, observed, and—so to speak—*handled* by medical students. The benefit of such regulations would be universally felt; quackery would hang its head, and uneducated incompetence shrink from attempting the duties of such a deep, wide, high and noble calling as that of medicine and surgery.

EFFECTS OF THE IMAGINATION ON THE ACTION OF MEDICINES.

The effect of the imagination upon the various functions of the body is one among many causes which render it difficult to judge of the agency of remedies in modifying or curing disease. How often has it happened that a well-marked result has followed the taking of an inert substance, when the patient was made to believe that such an effect *would* follow. Hence the effects said to be produced by medicines administered in infinitesimal doses, and even by *smelling* of the remedy, which Hahnemann believed, or pretended, to be a potent method of introducing medicinal agents into the system. A curious instance illustrating this effect came under our notice recently. A little girl, about

three years old, of an imaginative turn of mind, who had always enjoyed good health, became suddenly constipated, after some change of diet, while making a visit from home. Every effort was made, by employing such articles of food as were likely to remove the difficulty, but in vain. In spite of cracked wheat, fruits, molasses, and many other things, it was with difficulty that the child had a movement of the bowels once in four or five days, and then only with the aid of enemata. Recourse being had to medical advice, the mother was recommended to give the patient a dose of the fluid extract of senna every morning, since there seemed to be a disinclination on the part of the child to make any effort, and it was hoped that if the habit of evacuating the bowels at a particular time could be acquired, they might continue to act spontaneously. The medicine was bought, on the first day of this month, and placed on the mantel shelf, ready for use the next morning, and though no pains had been taken to impress the fact on the mind of the little girl, she knew that she was to take it. The next morning there was a spontaneous movement of the bowels, before the medicine was taken. This was regarded as accidental, but of course the senna was omitted, to be given the following day, when the same thing occurred again, and the child has since continued to be perfectly regular, without having taken a drop of medicine. Now we take it, a phial full of water, or of any homœopathic medicine, would have done just as good service as the senna. Suppose it was a teaspoonful of an infinitesimal which it had been proposed to give the child, it is likely the family would be strongly inclined to put faith in homœopathy, nor would it be difficult to persuade some people that homœopathic medicine acted just as powerfully if the patient only looked at it instead of swallowing it; which may be true, for aught we know.

"CROUP AND FALSE CROUP."

THE following remarks upon the different varieties of croup, are translated from the *Gazette Médicale de Paris* for May 8th, 1858.

"Four sorts, only, of well characterized affections of the class of acute diseases of the larynx, have been hitherto admitted, viz., spasmodic and stridulous laryngitis; pseudo-membranous or true croup; simple acute laryngitis, and spasm of the glottis. M. Chatelain, a physician of the town of Nancy, describes, as frequent and endemic in the east of France, a malady which presents all the real symptoms of croup, except the false membrane, the termination of which is also nearly always fatal, and which can neither be called pseudo-membranous laryngitis, spasmodic laryngitis, œdema of the glottis, simple acute laryngitis, the ulcerative erythema of Rilliet and Barthez, nor yet thymic asthma. This affection is cited by authors, but as an exceptional disease and one very difficult to diagnosticate. Dr. Chatelain, however, declares that it is frequent in his part of the country, and gives a methodic and careful description of it.

"The most remarkable fact about the disease is, that after coming usually to a rapidly fatal termination, there are no pathological appearances whatever. The following is the account of the symptoms as given by M. Chatelain; by comparing it with the symptomatology of the other affections of the same organ, practitioners may easily recognize this disease, so rare according to authors, but so frequent on the testimony of M. Chatelain.

"The symptomatology is that of false croup.

"The voice is wholly lost, and at the commencement constantly broken; the symptoms are not alarming; the child is lively: there is only difficult respiration, with *bruit de scie*; the intensity of the paroxysms increases.

"The affection is endemic: quite common in the spring; there is no false membrane, nor any glandular swelling; the larynx is healthy.

"The paroxysms are constant; there is very little or no redness of the pharynx; necroscopy shows no lesions whatever."

A VERDICT of $100.75 has been rendered, in the Superior Court of this city, against Mr. Emery Souther, apothecary, for the alleged delivery to a customer, Mrs. Bean, of a quantity of belladonna, instead of *balmony*, or snakeshead, an herb employed by botanic practitioners. The medicine was put up by a boy, who was quite sure he had given balmony, and who, moreover, produced in Court the package from which he had taken it. The evidence for the plaintiff was that Mrs. Bean became very sick in the night, after partaking of a tea made from the herb, and that her symptoms were those of poisoning from belladonna. We do not learn that the leaves employed by Mrs. Bean were examined by experts, and pronounced to be those of belladonna, which would be the only sure test. We were not present during the trial, but from the report of the case we have great doubts as to the justness of the verdict. The amount of damages claimed was $4000.

Boston Dispensary.—At a special meeting of the Board of Managers of the Boston Dispensary, held June 21st, the following officers were elected for the ensuing year:

Consulting Surgeons.—Drs. Solomon D. Townsend and Henry W. Williams.

Consulting Physicians.—Drs. Jacob Bigelow and Phineas M. Crane.

Surgeons.—Drs. Geo. H. Lyman, W. W. Morland, R. M. Hodges, D. D. Slade.

Physicians.—Drs. E. W. Blake, Chas. T. Homans, J. N. Borland, Francis Minot, Algernon Coolidge, F. E. Oliver, Buckminster Brown, Calvin Page.

Superintendent.—Dr. John B. Alley.

District Physicians.—District 1, Dr. Stephen Mighill. Dist. 2, J. W. Hinckley. Dist. 3, J. A. Lamson. Dist. 4, Henry K. Oliver. Dist. 5, Robert Ware. Dist. 6, Sam'l A. Green. Dist. 7, L. M. Sargent. Dist. 8, Hugh Ferguson.

Apothecary.—Henry M. Billings.

MARRIED,—At Tisbury, Martha's Vineyard, Moses Brown, M.D., of Newburyport, to Miss Miriam H., daughter of Hon. Charles Smith.

DIED,—In this city, 19th inst., Dr. Henry Gardner, 79.—At Westfield, Erasmus D. Worth, M.D., late teacher of elocution in Yale College, 51.

Deaths in Boston for the week ending Saturday noon, June 19th, 65. Males, 28—Females, 37.—Accident, 2—inflammation of the bowels, 1—congestion of the brain, 2—cancer, 3—consumption, 11—convulsions, 1—croup, 1—dysentery, 2—diarrhœa, 1—dropsy, 1—dropsy in the head, 2—drowned, 2—debility, 2—infantile diseases, 5—scarlet fever, 2—typhoid fever, 2—gravel, 1—disease of the heart, 2—inflammation of the lungs, 2—disease of the liver, 1—marasmus, 2—measles, 1—old age, 1—palsy, 2—pleurisy, 2—rheumatism, 1—scrofula, 1—teething, 1—unknown, 2—whooping cough, 3.

Under 5 years, 29—between 5 and 20 years, 4—between 20 and 40 years, 9—between 40 and 60 years, 12—above 60 years, 11. Born in the United States, 51—Ireland, 12—other places, 2.

Worcester North District Medical Society.—At a meeting of physicians held in Fitchburg, on the fifth day of June, A. D. 1858, in accordance with a warrant issued by the Massachusetts Medical Society, for the purpose of organizing the "Worcester North District Medical Society," the following officers were chosen: President—Dr. Wm. Parkhurst, Petersham. Vice President—Dr. Jonas A. Marshall, Fitchburg. Treasurer—Dr. Thos. R. Boutelle, Fitchburg. Secretary—Dr. James C. P. Cummings, Fitchburg. Librarian—Dr. James R. Wellman, Fitchburg. Censors—Drs. A. Hitchcock, Fitchburg; J. P. Willis, Royalston; C. Warner, Westminster; A. Miller, Ashburnham; J. A. White, Baldwinville. Commissioner on Trials—Dr. Alvah Godding, Winchendon.

Voted, That the meetings of this Society shall be held on the second Saturday of each quarter.

Voted, To adjourn.

A true copy from the records—Attest: JAMES P. C. CUMMINGS, *Secretary.*

Rhode Island Medical Society.—This Society held its 47th annual convention at the Redwood Library, Newport, on Wednesday, June 16th, Dr. Eldridge, Vice President, in the chair. The following officers were elected for the ensuing year. President—James H. Eldridge, M.D, East Greenwich. 1st Vice President—Charles W. Parsons, M.D., Providence. 2d Vice President—Henry E. Turner, M.D., Newport. Treasurer—George L. Collins, M.D., Providence. Recording Secretary—J. Henry Rathbone, M.D., Providence. Corresponding Secretary—Geo. P. Baker, M.D., Providence.

Albert C. Dedrich, M.D., Warwick; S. Randolph Merrill, M.D., Valley Falls; Thos. A. Hazard, M.D., Kingston, were elected members of the Society.

The following gentlemen were elected honorary members: Alfred Stille, M.D., Philadelphia; Isaac Hayes, M.D., Philadelphia; Solomon D. Townsend, M.D., Boston; James McKean, M.D., Topsham, Me.; Hugh H. McGuire, M.D., Winchester, Va.

The Trustees of the Fiske Fund submitted their report. No prize has been awarded for the year past, but for 1859 a prize of $200 is offered. Subject—the effects of the use of alcoholic liquors in tubercular disease, or in constitutions predisposed to such disease. To be shown by facts, presented, as far as possible, in a statistical form.

Amongst the various reports of committees submitted to the Convention, was one in relation to the formation of a State Medical Library.

Dr. Walter Channing, of Boston, was appointed Orator for the next annual meeting.

After various other business, the Convention adjourned to the Atlantic House, where an elegant dinner was provided. J. H. RATHBONE, *Rec. Sec'y.*

Subnitrate of Bismuth as a Test of Sugar in the Urine.—It is known that the subnitrate of bismuth is reduced, under the influence of alkaline secretions containing grape sugar, while it undergoes no change in the same solution containing cane sugar. In accordance with this fact, having ascertained that uric acid and the ordinary salts of the urine do not decompose the subnitrate of bismuth, M. Boettger has lately suggested an easy and rapid way of demonstrating the presence of sugar in urine. To the suspected urine he adds an equal volume of a solution of carbonate of soda, and afterward from fifteen to thirty grains of subnitrate of bismuth. He then boils the mixture, and almost immediately, if the urine contain diabetic sugar, the subnitrate turns black. This reaction is most clearly marked, and is very characteristic. If the salt preserves its white color, the urine contains no trace of diabetic sugar.—*Moniteur des Hopitaux* and *Journal de Chimie Medicale.*

Death of Dr. Croswell.—Dr. Andrew Croswell, who died at his residence in Mercer, Me., on the 4th inst., aged 80 years, was a native of Plymouth, Mass. He graduated at Harvard College in 1798, and studied Medicine with Dr. Zaccheus Bartlett, of Plymouth. He settled as physician in the town of Fayette, Me., and subsequently removed to Mercer, which was afterward his permanent residence. He acquired an extensive practice, and by his skill and success gained the entire confidence, not only of the people of the town in which he resided, but of all the neighboring towns.